

Date: Tuesday, 22/04/2008 9:29:04 AM
 User: Jean-Luc Menard

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : STOPPER
Job Number : 38721	
Estimate Number : 13246	
P.O. Number :	Part Number : D36953
This Issue : 22/04/2008 S.O. No. :	Drawing Number : D3695 PROD PROTO
Prsht Rev. : NC	Project Number : N/A
First Issue : 1/1 Type : MACHINED PARTS	Drawing Revision : PROTO 08.05.20
Previous Run : 38477	Material :
Written By : <i>[Signature]</i> 08-04-22	Due Date : 29/04/2008 Qty: 2 Um: Each
Checked & Approved By :	
Comment : Est Rev: A 08-03-27 new issue DD verified by: <i>[Signature]</i>	

Additional Product

FOR ENGINEERING USE ONLY

PROTOTYPE

POSITIVE
RECALL

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	M6061T6B2500X03500	6061-T6 Bar 2.5" x 3.5"
-----	--------------------	-------------------------



Comment: Qty.: 0.3728 f(s)/Unit Total : 0.7455 f(s)
 6061-T6 Bar 2.5" x 3.5"
 BATCH: M102838

2.0	BAND SAW	BAND SAW
-----	----------	----------



Comment: Cut blank 4.25" long

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
-----	-------	--------------------------------



Comment: HAAS CNC VERTICAL MACHINING #1

1- Mill as per Folio FA733 Rev: *A* & Dwg D3695 Rev: *A*

2-Deburr per dwg D3695

3-TAP FOR 3/8"-16 HELICOIL

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

5.0	QC8	SECOND CHECK
-----	-----	--------------



Comment: SECOND CHECK

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STOPPER

Job Number: 38721

Part Number: D36953

Job Number:



Seq. #:

Machine Or Operation:

Description:

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

BL 08-05-09

2

7.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

M-F 08/05/09

2X

8.0

MS21209G6-25

Heli-Coil



Comment: Qty.: 1.0000 Each(s)/Unit Total: 2.0000 Each(s)

Heli-Coil M/08/138

Batch: H107990

FF 08-05-14

2

9.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Install helicoil as per dwg D3695

FF 08-05-14

2

10.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08-05-14

11.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify with Dart part # using a fine point permanent marker and Stock

Location:

N/A

12.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08-06-04 Prototype

Job Completion



POSITIVE RECALL

EFFECTIVE DATE

RELEASED DATE

6.1

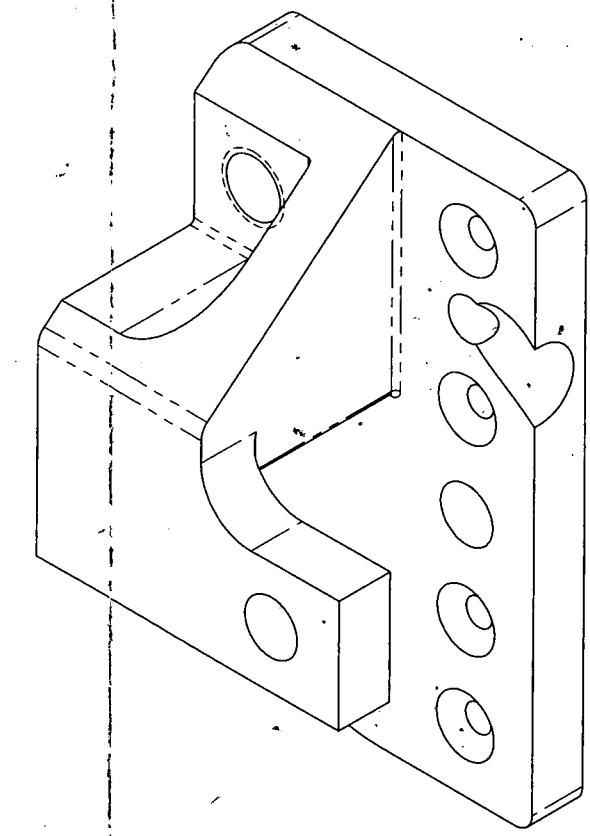
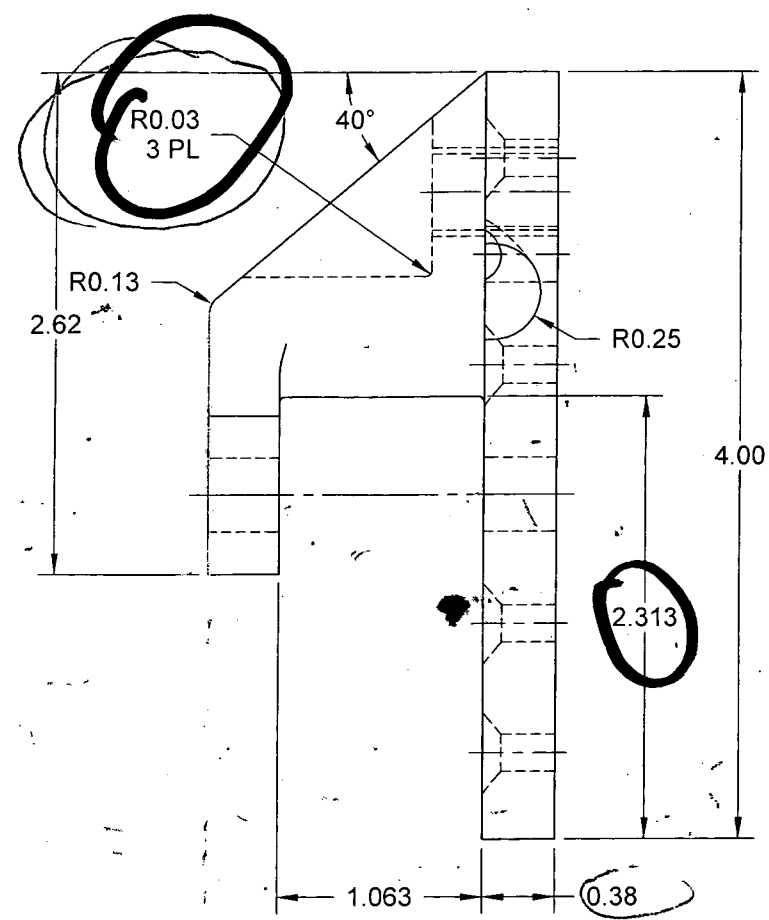
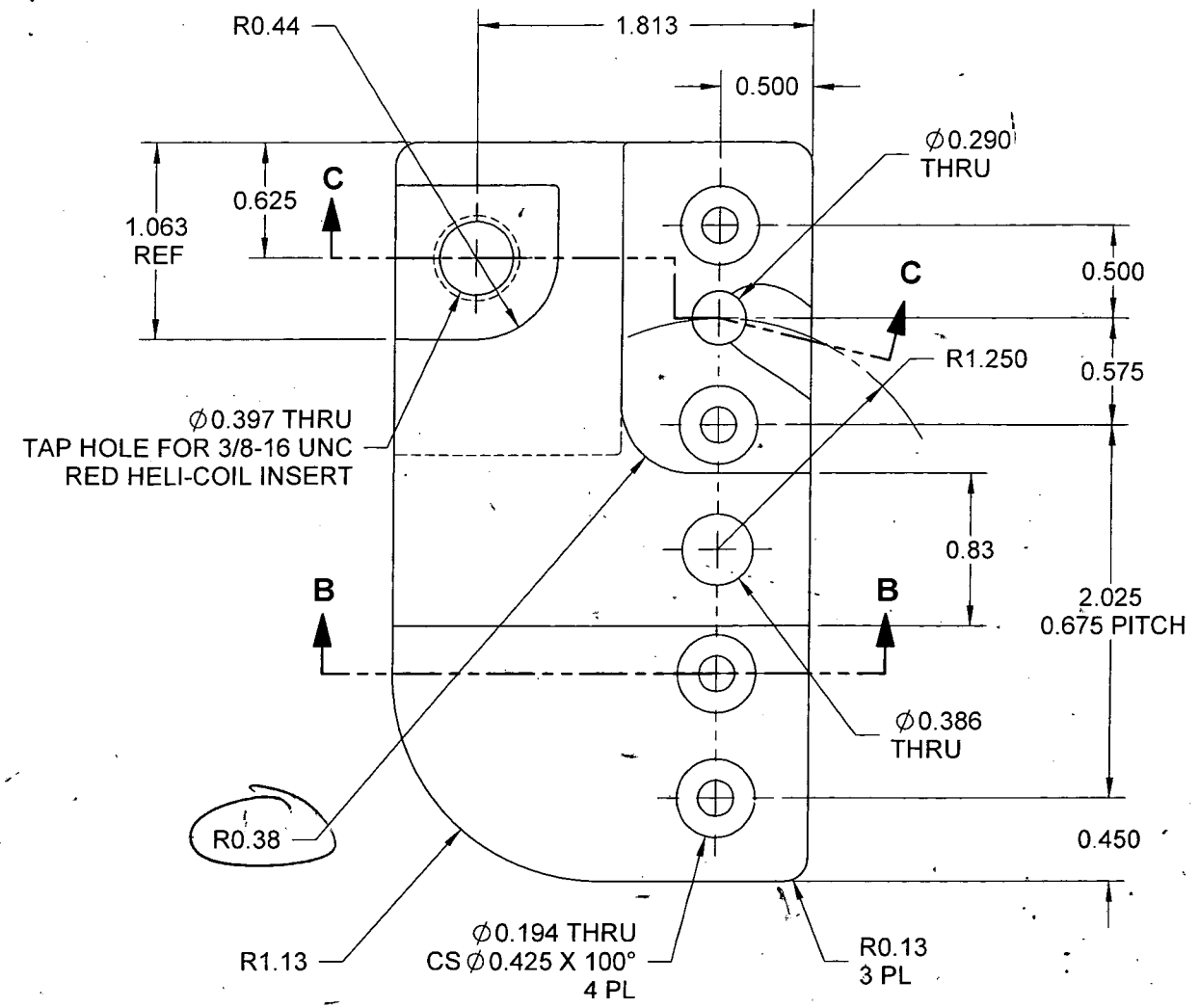
powder coat as per dwg.

do not powder coat in the threaded holes.

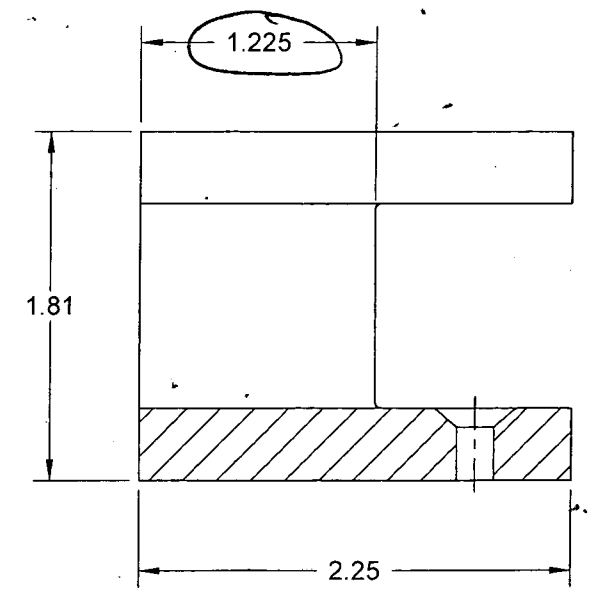
Change To 00224A

MF 08-06-13

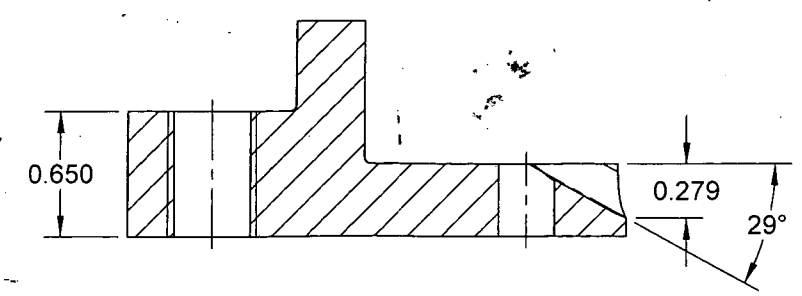
P/O



1,2 D3695-3 STOPPER



SECTION B-B



SECTION C-C

PROTOTYPE
PLEASE RETURN ALL ISSUED
DATA TO ENGINEERING
PRELIM
08.04.22

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3695	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		SLIDER ASSEMBLY	NTS
DATE	08.03.14	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DART AEROSPACE LTD		Work Order:	38721
Description: <i>Stopper</i>		Part Number:	5295-3
Inspection Dwg:	Rev:	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
625	$\pm .010$	625	/			
1.063 ref.	$\pm .010$	1.060	/			
$\emptyset .397$	$\pm .006$ $\pm .001$	$\emptyset .399$	/			
$\emptyset .194$	$\pm .006$ $\pm .001$	$\emptyset .194$	/			
CS $\emptyset .425 \times 100^\circ$		$\emptyset .420 \times 100^\circ$	/			
$\emptyset .386$	$\pm .006$ $\pm .001$	$\emptyset .387$	/			
.83	$\pm .030$.831	/			
$\emptyset .290$	$\pm .006$ $\pm .001$	$\emptyset .290$	/			
.450	$\pm .010$.452	/			
2.025	$\pm .010$	2.025	/			
.575	$\pm .010$.575	/			
.500	$\pm .010$.501	/			
.500	$\pm .010$.500	/			
1.813	$\pm .010$	1.813	/			
2.62	$\pm .030$	2.618	/			
1.063	$\pm .010$	1.064	/			
.38	$\pm .030$.379	/			
2.313	$\pm .010$	2.319	/			
4.00	$\pm .030$	4.000	/			
R.25		R.25	/			
1.225	$\pm .010$	1.220	/			
1.81	$\pm .030$	1.812	/			
2.25	$\pm .030$	2.279	/			

Measured by: SD	Audited by: <i>[Signature]</i>	Prototype Approval: <i>[Signature]</i>
Date: 08/05/04	Date: 08.05.04	Date: 08.05.12

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

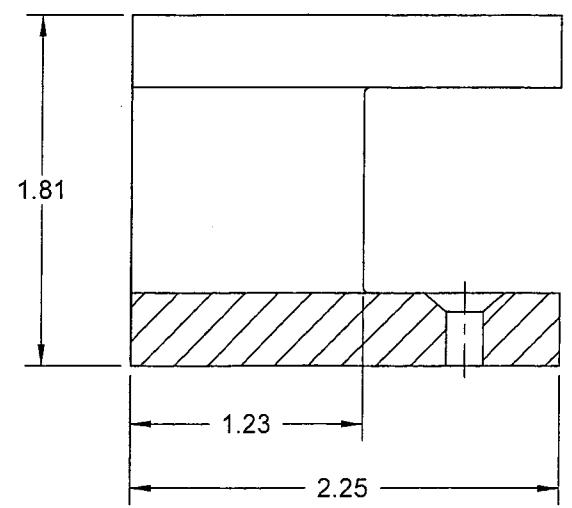
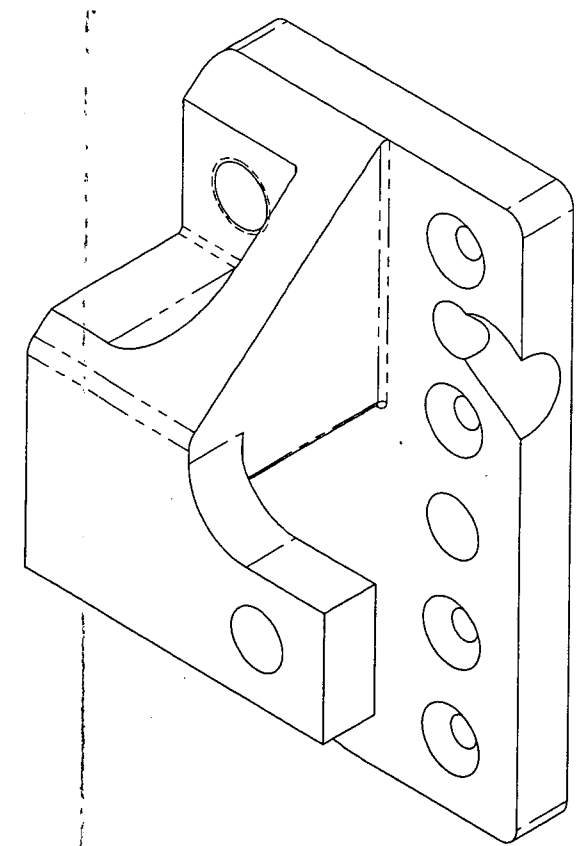
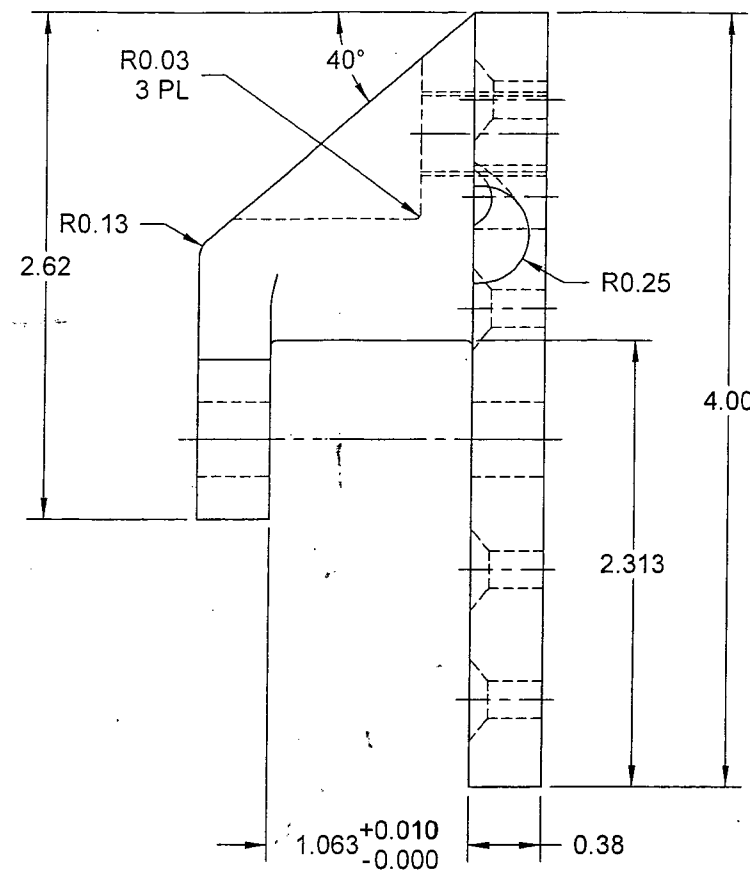
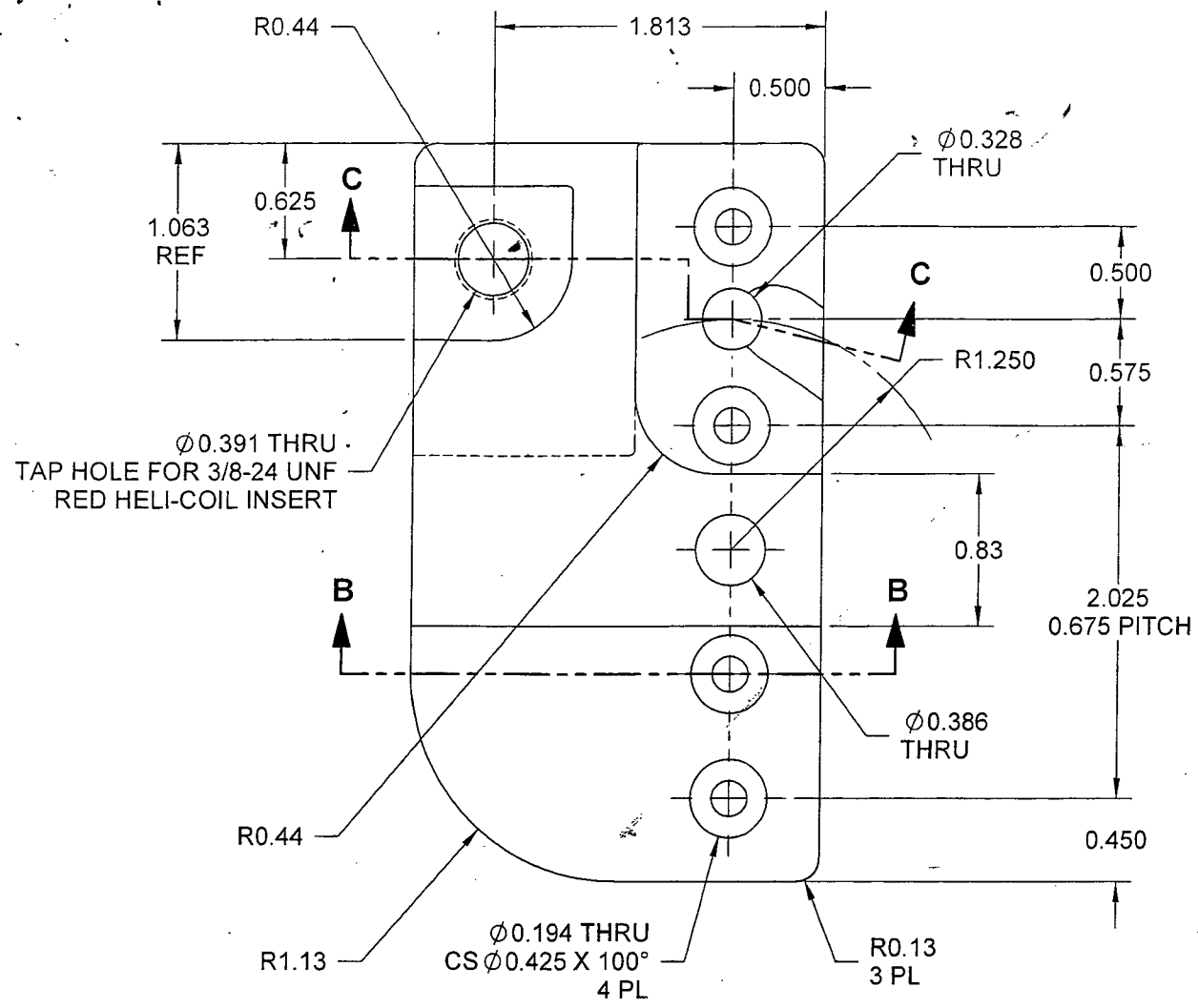
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: X Date: _____

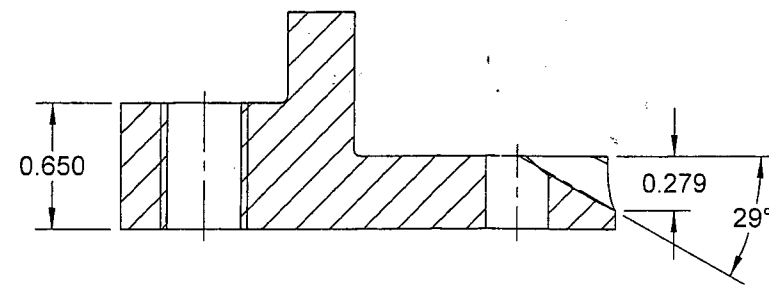
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08-05-20	3.0	Design Change (ENG)						
	PART# ①	3/8-16 Now 3/8"-24 Helico		① Weld TAPED Hole				
	PART# ②	0.257" Hole Now 0.328.		② Re-MACHINE To New				
		1.063 +/- .010 Now 1.063 +/- .000		Dwg DATED 08-05-20. : SCRAPED.				

NOTE: Date & initial all entries



SECTION B-B



SECTION C-C

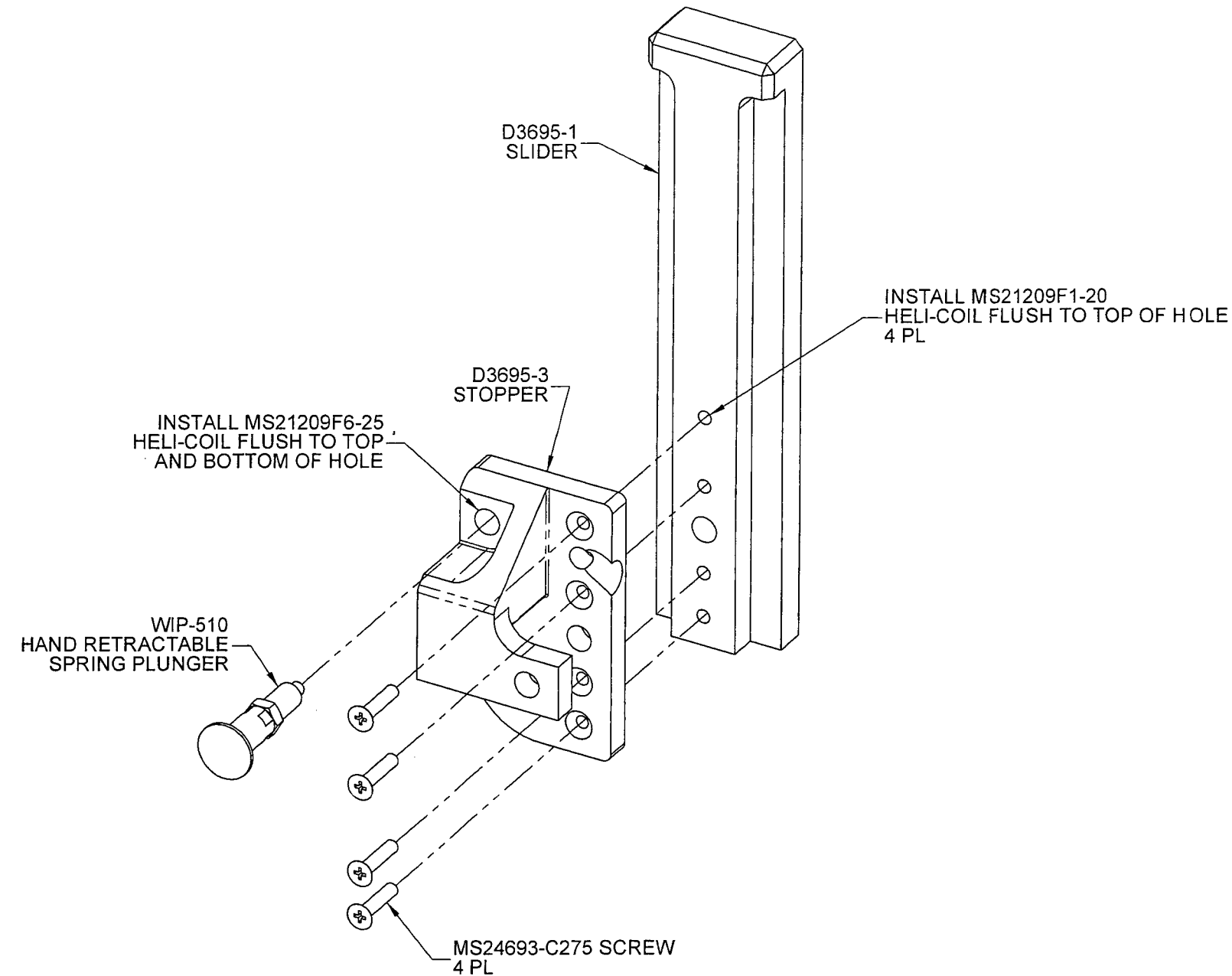
PROTOTYPE
 PLEASE RETURN ALL ISSUED DATA TO ENGINEERING
PRELIMINARY ISSUE
 14 08 07 20

D3695-3 NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/-T6510/-T6511/-T62) BAR PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR PER AMS-QQ-A-200/8 (OR AMS 4160) (REF. DART SPEC. M6061T6B)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.19 lbs

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3695	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		SLIDER ASSEMBLY	NTS
DATE	08.03.14	COPYRIGHT © 2008 BY DART AEROSPACE LTD	
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QTY -041	P/N	DESCRIPTION
X	D3695-041	SLIDER ASSEMBLY
1	D3695-1	SLIDER
1	D3695-3	STOPPER
4	MS21209F1-20	HELI-COIL, SCREW LOCKING (RED)
1	MS21209F6-25	HELI-COIL, SCREW LOCKING (RED)
4	MS24693-C275	SCREW (OR MS24693-S275)
1	WIP-510	HAND RETRACTABLE SPRING PLUNGER

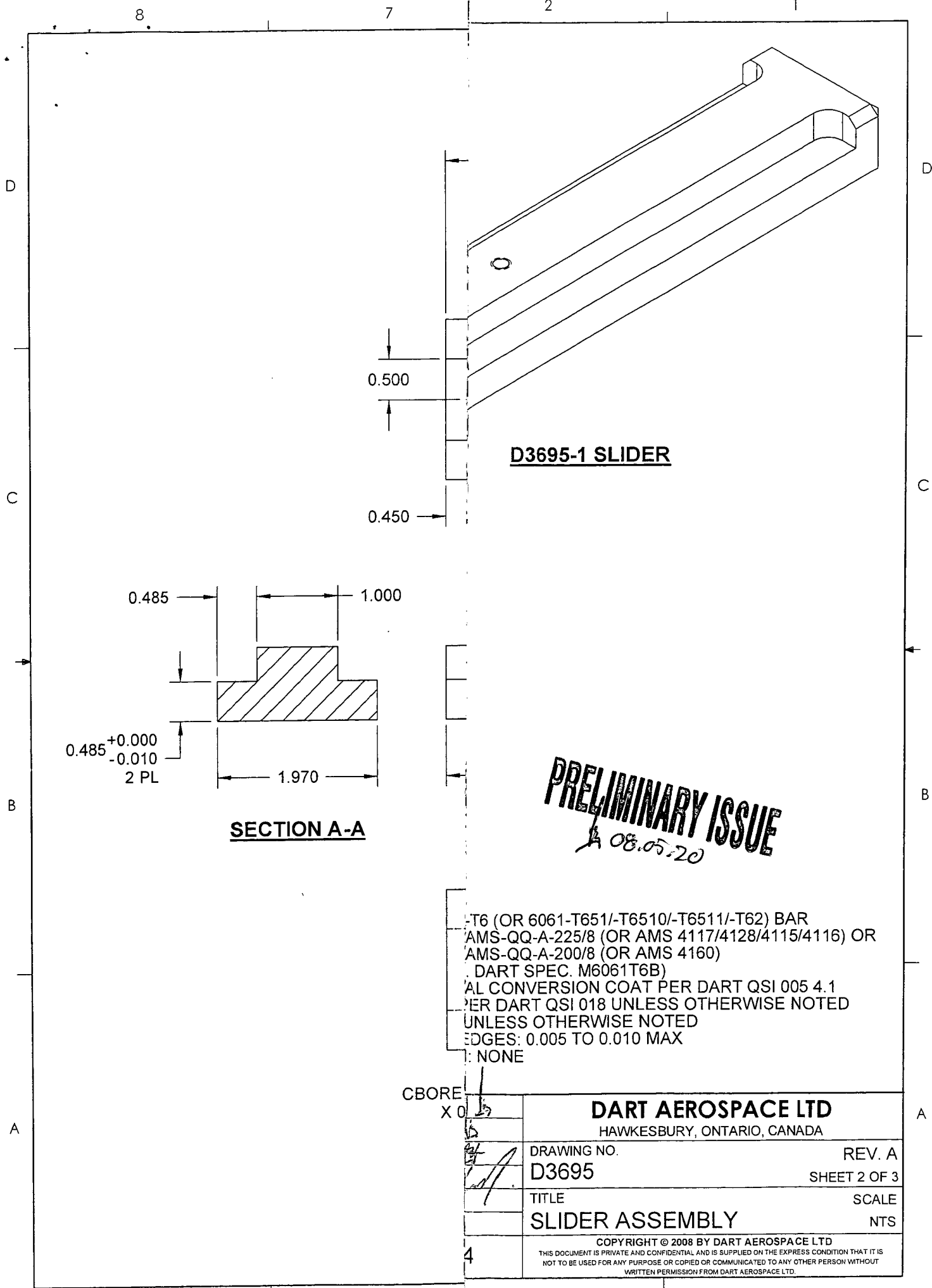


D3695-041 SLIDER ASSEMBLY

D3695-041 NOTES:
1) MATERIAL: NONE
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: NONE
7) WEIGHT: D3695-041 = 0.74 lbs

PRELIMINARY ISSUE
06.03.14

A	NEW ISSUE	MB	08.03.14
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3695	SHEET 1 OF 3
APPROVED		TITLE	SCALE
DE APPR.		SLIDER ASSEMBLY	NTS
DATE	08.03.14	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Date: Tuesday, 22/04/2008 9:29:04 AM
 User: Jean-Luc Menard

Process Sheet

Jean-Luc

Customer : CU-DAR001 Dart Helicopters Services
 Job Number : 38721
 Estimate Number : 13246
 P.O. Number :
 This Issue : 22/04/2008 S.O. No. :
 Prsht Rev. : NC
 First Issue : 11 Type : MACHINED PARTS
 Previous Run : 38477
 Written By : 08-04-22
 Checked & Approved By :
 Comment : Est Rev:A 08-03-27 new issue DD verified by: JM

Drawing Name : STOPPER
 Part Number : D36953
 Drawing Number : D3695 PROD PROTO
 Project Number : N/A
 Drawing Revision : PROTO
 Material :
 Due Date : 29/04/2008 Qty: 2 Um: Each

Additional Product

FOR ENGINEERING USE ONLY

PROTOTYPE

POSITIVE
RECALL

Job Number:



Seq. #:

Machine Or Operation:

Description:

1.0

M6061T6B2500X03500

6061-T6 Bar 2.5" x 3.5"



Comment: Qty.: 0.3728 f(s)/Unit Total: 0.7455 f(s)

6061-T6 Bar 2.5" x 3.5"

BATCH: M102838

magnu
2/0:2541

(2)

2.0

BAND SAW

BAND SAW



Comment: Cut blank 4.25" long

08-05-07

(2)

3.0

HAAS1

HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

1- Mill as per Folio FA733 Rev: A & Dwg D3695 Rev: ACERTIFICATE OF CONFORMITY
REQ'D UPON DELIVERY

2-Deburr per dwg D3695

3-TAP FOR 3/8"-16 HELICOIL

SD 08/05/03

(2)

4.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

SD 08/05/03

(2)

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

08-05-07

(2)

Receiving Report

Date: 06/12/01
Supplier: Plyma Stainless

Batch No: M102838
Dart P/O: 2541

Packing Slip: Yes ☒ No ☐
Invoice: Yes ☐ No ☒
Receipt: Cash ☐ Cr ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐
Waybill Attached: Yes ☐ No ☒ N/A ☐
Shipment Complete: Yes ☒ No ☐ N/A ☐
QC6 Inspection ☒ N/A ☒
Work Order 11

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments
M2024T35	.080 sheet	64	96	0		

Initials of receiver (if shipment OK) Level 12 CB

Production/Admin: 06/12/01
Date: 06/12/01
Received/Costing: RQ 3193
Initial: CZ

Location WA

1	.875" HX X 12'			65.00	PCS	ok	65.00
	Heat # 200602835						
	ALUMINIM 2024-T3						
2	.080 X 48" X 144"			432.50	PCS		865.00
	Heat # 381512						
1	FRT			.00	PCS		.00
1	BKR			.00	PCS		.00
1	SKID CHARGE			.00	PCS		.00

Sub-Total
G.S.T.

2800.00
168.00

TOTAL →

2968.00

FRAIS D'ADMINISTRATION DE 1½% PAR MOIS (18% PAR ANNÉE) SUR COMPTE PASSÉ DÙ.
LE PRÉSENT CONTRAT SERA RÉGI PAR LES LOIS DE LA PROVINCE DE QUÉBEC ET COMME
AYANT PRIS NAISSANCE DANS LE DISTRICT JUDICIAIRE DE MONTRÉAL.
ADMINISTRATION CHARGES OF 1½% PER MONTH (18% PER YEAR) ON OVERDUE ACCOUNTS.
THE PRESENT AGREEMENT SHOULD BE GOVERNED BY THE QUEBEC LEGISLATION AND SHOULD
BE CONSIDERED AS HAVING ORIGINATED IN THE JUDICIAL DISTRICT OF MONTREAL.

BR 369.



SERVICE CENTER METALS
5850 Quality Way
Prince George, VA 23875

CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER 603098		ITEM 47	
ALL TO	MANIFEST NUMBER 21185	DIE NUMBER MRB0440	DATE OF SHIPMENT 7/6/2006
SHIP TO	CUSTOMER PO P60401CG009 CT	ALLOY/TEMPER 6061-T6511	SALESMAN Patty Schreiner
	CUSTOMER PART NUMBER MRB0440	DESCRIPTION MQRB 2.500x3.500	
CERTIFICATION ASTM-B221-04a MQ Stencil		SPECIFICATION AMS-QQA-200/8	

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCM extrusions are manufactured in the USA from ingot melted and cast in the United States or Canada.

Mechanical Properties

Lot No.	Test No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
603098-47-1	1	07/05/06	51.3	47.6	17.4
603098-47-1	2	07/05/06	52.1	48.6	18.3

Based on documentation furnished to us by the mill / supplier, we certify this material to be free of mercury contamination.

JUL 07 2006

Amber Thomas

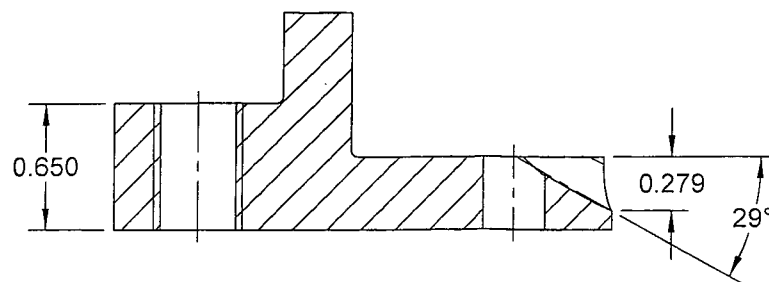
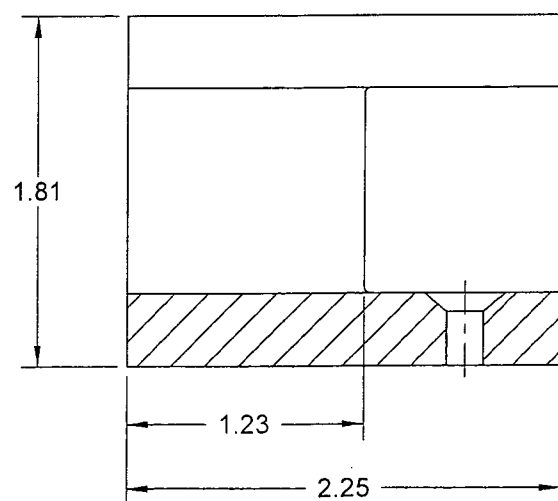
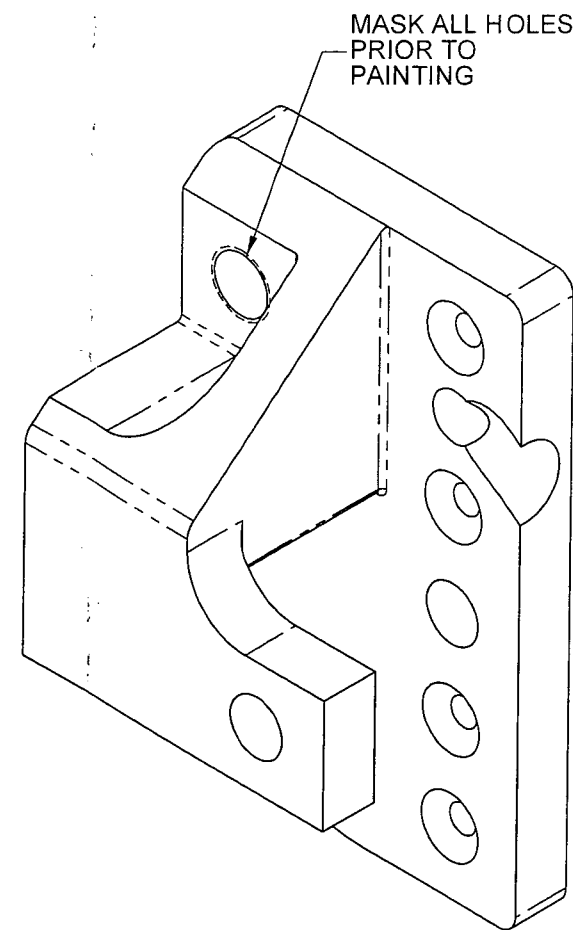
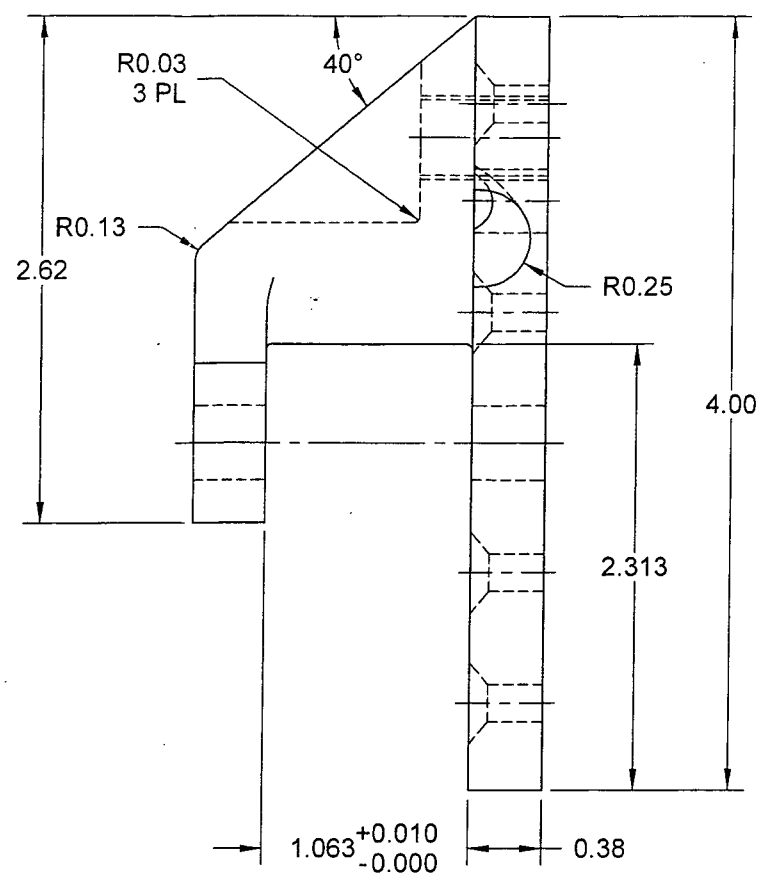
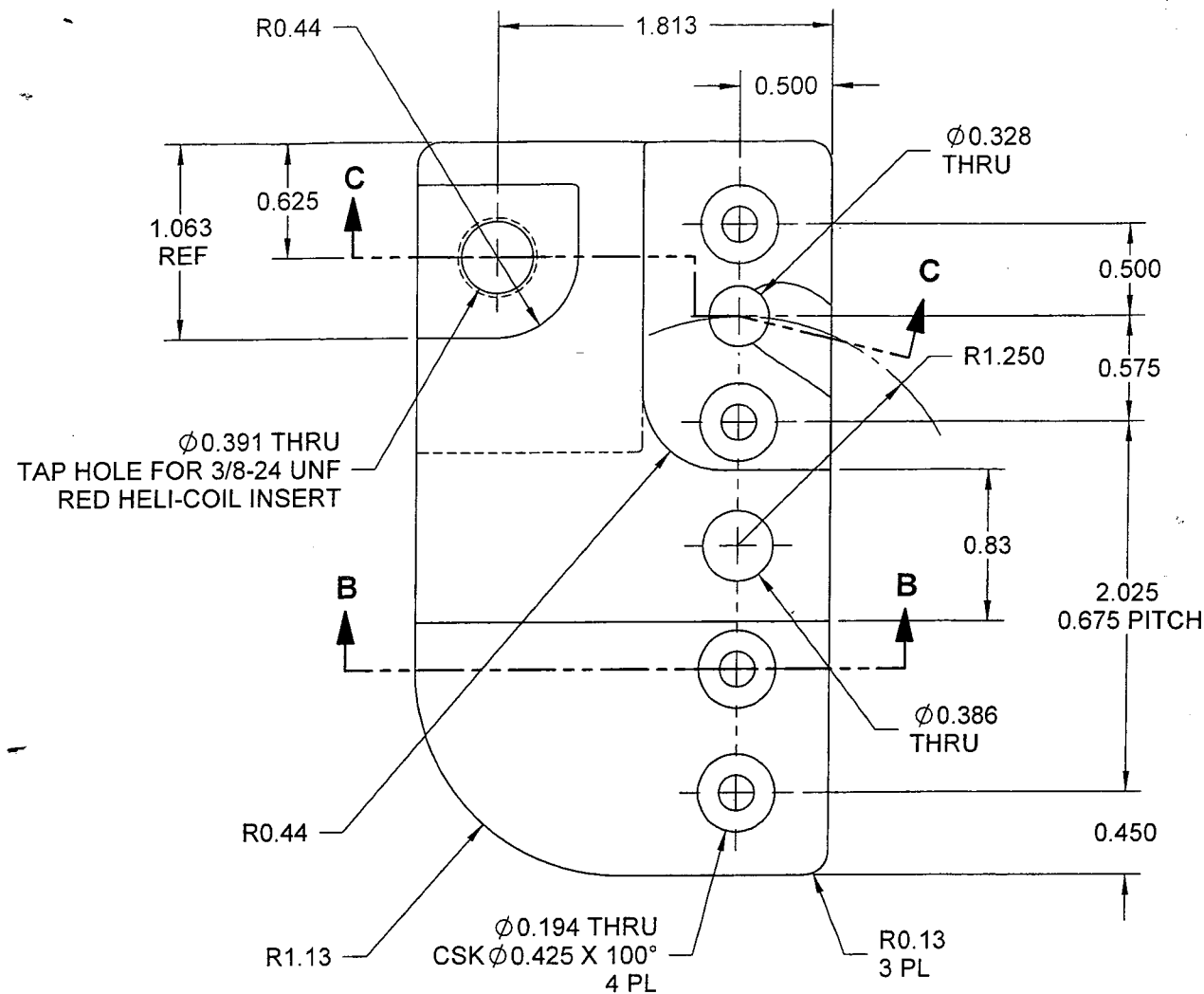
Chemical Composition for Alloy 6061

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	B	Zr	Other Each	Other Total
Min	0.40		0.15		0.8	0.04						
Max	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15			0.05	0.15

Robert M. Ramsey
Manager of Quality & Technical Services

Inc 11-30-06

S6112NS042-3 MGENA STAINLESS PO: 065653EB / VB Part #: 2.00PC 250.00LB



D3695-3 STOPPER

PRELIMINARY ISSUE

D3695-3 NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/-T6510/-T6511/-T6512) BAR PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR PER AMS-QQ-A-200/8 (OR AMS 4160) (REF. DART SPEC. M6061T6B)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT GREY SANTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.19 lbs

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3695	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		SLIDER ASSEMBLY	NTS
DATE	08.06.26	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	